

IN THE CLAIMS

Please make the following amendments to the claims:

1. (Original) A device for making automated transaction decisions comprising:
a memory to store a series of historical records and results, where each record contains a set of data values for a corresponding set of variables;
a transaction input unit to convey corresponding data values of a transaction for which a decision is to be made;
a decision output unit to convey a recommended decision;
a self-configuring modeler to configure itself based upon information stored in memory in order to predict expected results from any set of data values; and
a controller coupled to the modeler and the transaction input unit to generate a decision output.
2. (Original) The device in Claim 1 further including an output unit to convey a probability or expected value of an expected result given the decision.
3. (Original) The device in Claim 1 further including an output unit to convey a model produced by the modeler.
4. (Original) The device in Claim 1 further comprising a previously configured modeler.
5. (Original) The device in Claim 1 wherein the model is continuously updated with each transaction.
6. (Currently Amended) The device in Claim 5, further comprising: wherein the modeler configures itself to recommend an optimal solution in a reduced time period
a scoring evaluator to compare two Bayesian networks and to assign a higher score to a one of the two networks that has a shorter evaluation time.

7. (Original) A method for analyzing and representing data in a computer system comprising:

determining statistical probabilities of each combination of data values;
applying the statistical probabilities to determine an optimal predictive model;
applying a transaction consisting of a new set of data values to the predictive model in order to yield an expected set of probabilities for a result of each possible decision;

presenting the representation to a control mechanism capable of enacting decisions based on the knowledge represented; and
generating a decision output.

8. (Original) The method in Claim 7 further comprising conveying an probability or expected value of the decision.

9. (Original) The method in Claim 7 further comprising means conveying a model produced by a modeler.

10. (Original) The method in Claim 7 wherein the predictive model is adjusted based upon each transaction and result.